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April 29, 2005

U. S. Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

**Re: NPDES Stormwater General Permit
2004-2005 Annual Report
Town of Westford, MA**

To Whom It May Concern:

Enclosed for your records is the NPDES Stormwater General Permit 2004-2005 Annual Report for the Town of Westford, MA. The Annual Report has simultaneously been filed with the Massachusetts DEP.

If you have any questions or require any additional information, please do not hesitate to call me at 978-692-5520 or our Consultant, Rich Niles with Comprehensive Environmental Inc. at (800)725-2550 ext. 307.

Sincerely,

Town of Westford, Massachusetts

John Livsey, P.E.
Town Engineer

cc: Massachusetts Department of Environmental Protection, Worcester Office
Rich Niles, Comprehensive Environmental Inc.

Enclosure – NPDES Phase II Small MS4 General Permit 2004-2005 Annual Report

05

Municipality/Organization: Town of Westford, MA

EPA NPDES Permit Number: MAR05C490

MADEP Transmittal Number: W-035577

Annual Report Number

& Reporting Period: No. 2: May 1, 2004-April 30, 2005

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: John Livsey

Title: Town Engineer

Telephone #: 978-692-5520

Email: jlivsey@westford.mec.edu

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Printed Name: Steven Ledoux

Title: Town Manager

Date:

4/29/05

Part II. Self-Assessment

The Town of Westford has completed the required assessment and determined that our municipality is in compliance with all permit conditions, except for the following: permit eligibility with respect to endangered species and historic places. The Town has begun the process of evaluating stormwater outfalls and permit compliance with the Natural Heritage and Endangered Species Program and the Massachusetts Historical Commission.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1A	Stormwater Flyer for Residents	SuAsCo & Westford DPW	Flyers distributed to 75% of residents, compiled & considered “survey” results.	Flyers were mailed in year 1 to all residents. The same flyers were placed on display at the Town Hall.	Continue displaying flyers at public places. Compile results from “survey” in flyer and consider with the SWMP (assistance from SuAsCo).
Revised					
1B	Lesson Plan for 5 th Graders	SuAsCo & Westford DPW	Develop & distribute lesson plan, teach in one or more grade 5 classes.	The Westford Engineering Department used the SuAsCo curriculum “Stormwater Matters” to teach an introductory lesson plan to all grade 5 classes during the week ending 4/29/05.	No activities are planned; however, the Westford Engineering Department will discuss continuing the program with assistance from local schools.
Revised					
1C	Stormwater Flyer for Businesses	SuAsCo & Westford DPW	Flyers distributed to 50% of businesses, stormwater logo displayed by 25% of businesses.	NOI specified to begin this BMP in Permit Year 3.	Distribute stormwater flyer to at least 50% of businesses and include a self test to grade stormwater compliance. Provide stormwater logo decals for businesses that deem themselves “stormwater aware and participatory”.
Revised					
1D	Stormwater Media Campaign	SuAsCo & Westford DPW	Media information packet, 4 press releases generated.	NOI specified to begin this BMP in Permit Year 4.	NOI specified to begin this BMP in Permit Year 4.
Revised					

1E	Stormwater Video	SuAsCo & Westford DPW	Show video at one public meeting and once on local cable.	NOI specified to begin this BMP in Permit Year 5.	NOI specified to begin this BMP in Permit Year 5.
Revised					
1F	Recycling/Trash Info. on Website	Recycling Commission	Update website regularly, copies of web pages.	The Recycling Commission updated the website as needed.	Continue website updates and retain copies of web pages.
Revised					
1G	Recycling/Trash Mailing to Residents	Recycling Commission	Mail to 75% of residents and display pamphlets in Town offices.	Pamphlets were mailed to all residents and copies were made available at the Town Hall.	Continue displaying pamphlets at public places.
Revised					
1H	Advertise HHW Info. in Community Phonebook	Recycling Commission	Copy of advertisement in the phonebook.	Information about the household hazardous waste collection was advertised in the local phonebook.	This BMP is scheduled to occur again in Year 4.
Revised					
1I	Advertise Brush/Multi Collection on Cable and in Paper	Recycling Commission	Copy of advertisement on cable, website and local paper.	The brush and multi collection events were advertised on cable, website, and the local paper.	Continue advertising the brush and multi collection events.
Revised					
1J	Leaf Dumping Article in Paper	Conservation Commission	Copy of article in local paper once per year.	An article discussing the proper disposal of leaves and yard waste was placed in the Westford Eagle.	Continue placing the leaf dumping article in the local paper.
Revised					
1K	Leaf Dumping Pamphlet to Public	Conservation Commission	Copy of pamphlet, # of residents reached.	NOI specified to begin this BMP in Permit Year 3.	Distribute one pamphlet describing the effects of leaves on receiving waters.
Revised					
1L	Leaf Dumping Pamphlet at Events	Conservation/ Water/ Board of Health	Pamphlet displayed at two events.	The leaf dumping educational pamphlet was displayed at the Annual Health Fair and Drinking Water Day.	Continue displaying pamphlet at two events.
Revised					
1M	Fertilizer Pamphlet to Businesses	Water Department	Copy of pamphlet, distributed to all landscaping businesses.	NOI specified to begin this BMP in Permit Year 3.	Distribute one pamphlet describing the impacts runoff containing fertilizer can have on receiving waters to all landscaping businesses.
Revised					

IN	Fertilizer Info. in Newsletter	Water Department/ Engineering	Copies of semi-annual newsletters discussing fertilizers.	Fertilizer information was included in the annual newsletter prepared by the Westford Water Department and the stormwater pamphlet (BMP 1A).	Continue semi-annual distribution of fertilizer information with Water Department newsletter and stormwater pamphlets.
Revised					
IO	Septic System Pamphlets in Water Department	Water Department	Pamphlets available at Water Department at all times.	Septic system Pamphlets were made available at the Water Department throughout the year.	Continue to make septic system pamphlets available.
Revised					
IP	Septic System Pamphlets at Events	Water Department/ Board of Health	Display pamphlets at two events.	The septic system educational pamphlet was displayed at the Annual Health Fair and Drinking Water Day.	Continue displaying pamphlet at two events.
Revised					
IQ	Hazardous Material Bylaw Info. on Website	Board of Health	Maintain website regularly.	Hazardous material bylaw information was posted on the Town's website.	Continue website postings.
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
2A	Stormwater Traveling Display	SuAsCo & Westford DPW		N/A, completed in Year 1.	No further activities are planned.
Revised					
2B	Poster Contest for Fifth Grader	SuAsCo & Westford DPW	Poster contest is held and entries are received, judged and displayed in year 2.	The stormwater poster contest was introduced as part of the "Stormwater Matters" lesson plan that was taught to all grade 5 classes in April 2005.	The stormwater poster contest will begin in May with entries expected by the end of June. Posters will be displayed in public places.
Revised			Beginning of year 3.		
2C	Poster Contest for High Schoolers	SuAsCo & Westford DPW	Poster contest is held and entries are received, judged and displayed in year 3.	NOI specified to begin this BMP in Permit Year 3.	Develop poster contest and display posters in public places by the end of the permit term.
Revised					

2D	Local Stormwater Summit Event	SuAsCo & Westford DPW	Hold local multi-community summit in year 4.	NOI specified to begin this BMP in Permit Year 4.	NOI specified to begin this BMP in Permit Year 4.
Revised					
2E	Stormwater Super Summit Event	SuAsCo & Westford DPW	Municipal participation in the Super Summit, stormwater "survey" to 75% residents, compiled & considered results.	NOI specified to begin this BMP in Permit Year 5.	NOI specified to begin this BMP in Permit Year 5.
Revised					
2F	Curbside Recycling	Department of Public Works	Continued Town service.	Curbside recycling was picked up every other week.	Continue program for permit years 3-5.
Revised					
2G	In Town HHW Drop-off	Department of Public Works	Hold at least one event per year.	A household hazardous waste collection event was held on November 11, 2004. The following (estimated) waste volume was collected: 274 full cars, 96 half cars, 2 roll-offs and 5 asbestos drums.	Hold one HHW event and track waste quantities received.
Revised					
2H	HHW Drop-off in Lexington	Department of Public Works	Advertise service on the Town website and in flyers.	This service is no longer available to residents.	No further activities are planned.
Revised					
2I	Leaf Drop-off at Laughton's Nursery	Department of Public Works	Continue service of leaf drop-off.	Leaf drop off was made available at Laughton's Nursery, but a fee was charged by the nursery to accept materials.	Continue to advertise the leaf drop off service on the Town website and in flyers.
Revised			Advertise on the Town website and in flyers.		
2J	Brush Drop-off in Westford	Department of Public Works	Hold one collection in April and October.	Four collection events were held during different times in April and October.	Hold at least two collection events.
Revised					
2K	Multi-Collection Events	Dep't of Public Works/Board of Health	Hold one multi-collection event twice per year.	Two multi-collection events were held to collect small mercury-containing devices.	Hold at least two collection events.
Revised					

2L	Mercury Drop-off at Board of Health	Board of Health	Collect mercury devices in the Board of Health office daily.	The Board of Health office was open daily to receive mercury-containing devices.	Continue mercury drop-off program.
Revised					
2M	Mercury Drop-off at Multi-Collection Event	Department of Public Works	Hold one multi-collection event twice per year.	Two multi-collection events were held to collect small mercury-containing devices.	Hold at least two collection events.
Revised					
2N	Public Meetings	Department of Public Works	Advertise and hold at least one public meeting every year for stormwater.	The progress of the Stormwater Management Program was discussed at a Selectmen's meeting.	Hold a public meeting to inform residents of the stormwater program.
Revised					
2O	Stormwater Contact	Highway Department	Establish contact and include information in pamphlets and on the Town's website.	The Town Engineer was identified as the stormwater contact regarding pollution and complaints in Year 1. Information was posted on the Town's website.	Update information as needed and continue to include stormwater contact information on the Town's website. Include contact information in educational pamphlets. Track stormwater calls and issues addressed.
Revised	Procedure to Address Public Comment		Record of calls and issues addressed.		

2a. No additions at this time.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
3A	Storm Sewer Map	Highway Department/ GIS	Expand and field verify all outfalls by year 5.	The storm sewer map was updated in GIS based on subdivision plans and as-builts. A field mapping program was conducted to identify additional drainage structures and fill in data gaps.	The results of the field mapping program will be integrated with existing data in GIS to finalize the storm sewer base map.
Revised					
3B	Illicit Discharge Bylaw	Engineering/ Conservation	Present draft bylaw to public in year 4, adopt in year 5.	A kick-off meeting was held on August 9, 2004 to introduce the Phase II requirements for Illicit Discharge Prohibition to Town departments and begin the bylaw development process.	Hold progress meetings to develop a draft bylaw by the end of year 3.
Revised			Copies of meeting minutes and memos.		

3C	Detection & Elimination Plan	Highway Department	Screen 25% of outfalls each year in 4 divided sections of Town.	Ten outfalls were identified as a high priority due to known water quality problems at receiving waters. These outfalls were screened for illicit discharges and dry weather flow sampling at 6 outfalls indicated 3 illicit discharges were present. Illegal dumping was observed at another outfall. The Town conducted source investigations at some locations, which required additional work to remove non-stormwater flows.	Complete source investigations and remove known illicit discharges.
Revised	IDDE Plan and Outfall Inspections		Prioritize areas of known water quality problems for inspections and removal of illicit discharges.		Develop a protocol and written strategy for Illicit Discharge Detection and Elimination activities. Continue inspecting outfalls for illicit discharges in high priority areas.
3D	Illicit Discharge Education for Public	SuAsCo/Public Works/ Highway/ Water/ Board of Health	Continued public education under Control Measures 1 and 2.	Public education information for illicit discharges was incorporated into BMPs under Control Measures 1 and 2.	Continue existing public education efforts and update illicit discharge information as needed or as new information arises.
Revised					
3E	Illicit Discharge Education for Municipal Employees	Highway Department	Education for employees under BMP 6H.	Information on illicit discharge detection and elimination was discussed at the DPW training session on December 14, 2004 (see also BMP 6H).	Continue municipal employee training program.
Revised					

3a. No additions at this time.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
4A	Wetlands Bylaw	Conservation Commission	Continue to implement existing Wetlands Bylaw.	The Town of Westford Conservation Commission enforced the Westford Wetlands Bylaw and Regulations.	Continue enforcement of Wetlands Bylaw and Regulations.
Revised					

4B	Construction Site Runoff Bylaw	Engineering/ Planning/ Conservation	Present draft bylaw to public in year 4, adopt in year 5.	A kick-off meeting was held on August 9, 2004 to introduce the Phase II requirements for Construction Site Runoff to Town departments and begin the bylaw development process.	Hold progress meetings to develop a draft bylaw by the end of year 3.
Revised			Copies of meeting minutes and memos.		
4C	Erosion, Sediment & Waste Controls	Engineering/ Planning/ Conservation	Copies of meeting minutes and memos. Improved site controls in year 4.	Methods to address erosion, sediment and waste controls at construction sites were discussed at the August 9, 2004 kick-off meeting.	Hold progress meetings, evaluate controls and incorporate into the draft bylaw for Construction Site Runoff.
Revised			Copies of meeting minutes and memos.		
4D	Site Plan Review Procedures	Engineering/ Planning/ Conservation	Improved site plan review procedures in year 4.	Site plans are currently reviewed by the Engineering Department and Conservation Commission for erosion and construction site runoff BMPs. Additional site plan review criteria were discussed at the August 9, 2004 kick-off meeting.	Hold progress meetings, evaluate site plan review criteria and incorporate into the draft bylaw for Construction Site Runoff.
Revised			Copies of meeting minutes and memos.		
4E	Site Inspection & Enforcement	Engineering/ Planning/ Conservation	Records of current enforcement actions, site inspection procedures for all land disturbance >1 acre.	Construction sites subject to the Wetlands Bylaw were inspected on a regular basis by the Conservation Commission. Site inspection and enforcement procedures to comply with the Phase II requirements were discussed at the August 9, 2004 kick-off meeting.	Hold progress meetings, evaluate site inspection and enforcement procedures, options, checklists and incorporate into the draft bylaw for Construction Site Runoff.
Revised			Copies of meeting minutes and memos.		
4F	Construction Site Contact	Highway Department	Establish contact and include information in pamphlets and on the Town's website.	The Town Engineer was identified as the stormwater contact regarding pollution prevention, complaints and construction runoff in Year 1. Information was posted on the Town's website.	Update information as needed and continue to include stormwater contact information on the Town's website. Include contact information in educational pamphlets. Track stormwater calls and issues addressed.
Revised	Procedure to Address Public Comment		Record of calls and issues addressed.		

4a. No additions at this time.

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
5A	Post-Construction Site Runoff Bylaw	Engineering/ Planning/ Conservation	Present draft bylaw to public in year 4, adopt in year 5.	A kick-off meeting was held on August 9, 2004 to introduce the Phase II requirements for Post-Construction Site Runoff to Town departments and begin the bylaw development process.	Hold progress meetings to develop a draft bylaw by the end of year 3.
Revised			Copies of meeting minutes and memos.		
5B	Structural & Non-Structural BMPs	Engineering/ Planning/ Conservation	BMP design standards specific to the Town of Westford.	BMP design standards were introduced and discussed at the August 9, 2004 kick-off meeting.	Hold progress meetings and evaluate BMPs and design standards desirable by the Town of Westford. Incorporate results into the draft bylaw for Post-Construction Stormwater Management.
Revised	BMP Design Standards		Copies of meeting minutes and memos.		
5C	Long-Term Operation & Maintenance	Engineering/ Planning/ Conservation	O&M Plan/template and procedures required for new and redevelopment	Methods to address BMP operation and maintenance were discussed at the August 9, 2004 kick-off meeting.	Hold progress meetings and evaluate BMP O&M Plans, templates and methods for long-term effectiveness. Incorporate results into the draft bylaw for Post-Construction Stormwater Management.
Revised	BMP O&M Plan		Copies of meeting minutes and memos.		
5D	Structural BMP Implementation Procedures	Engineering/ Planning/ Conservation	Inspection and enforcement procedures to ensure BMPs are installed properly.	Methods to address BMP implementation procedures were not specifically discussed at the August 9, 2004 kick-off meeting.	Hold progress meetings and evaluate methods to inspect and enforcement BMP installation. Incorporate results into the draft bylaw for Post-Construction Stormwater Management.
Revised			Copies of meeting minutes and memos.		

5a. No additions at this time.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
6A	Catch Basin Schedule	Highway Department	Clean all catch basins and prioritize locations for cleaning.	All catch basins were cleaned in town at least once and twice on hills. Catch basins are visually inspected during cleaning to ensure proper function of the drainage system.	Continue catch basin cleaning and inspection program annually. Begin recording structure conditions and sediment data for future cleaning and maintenance priorities.
Revised					
6B	Regular Street Sweeping	Department of Public Works	Sweep streets a minimum of twice per year.	All streets were swept twice in town.	Continue street sweeping program annually.
Revised					
6C	Sand/Salt Covered	Highway Department	Sand and salt storage is covered.	Sand and salt storage was covered.	Continue to cover sand and salt.
Revised					
6D	Used Oil is Recycled	Highway Department	Waste oil recycling at the Highway Facility is permitted.	The Highway Department maintained permit compliance for the waste oil heater and recycling operation.	Continue existing practices for waste oil recycling to maintain permit compliance.
Revised					
6E	Municipal Hazardous Material Stored Inside	Highway Department	All hazardous materials are stored indoors.	The Highway Department stored all hazardous materials indoors.	Continue to store all hazardous materials indoors.
Revised					
6F	Implement SWPPP at Garage	Highway Department	SWPPP implemented and maintained.	The Highway Department implemented BMPs outlined in the Garage SWPPP.	Continue existing practices for pollution prevention and good housekeeping.
Revised	Implement SWPPP BMPs at Garage		SWPPP BMPs implemented.		
6G	Increase Vehicle Fueling Cover	Highway Department	Increase cover until new facility is constructed.	No progress has been made on this task to date since the new facility will be completed in 2005.	Utilize covered fueling station at the new DPW Facility.
Revised					

6H	Municipal Employee Training	Highway Department	All Highway Department employees trained annually, record of attendance sheet. Copy of training program	The Highway Department was trained on December 14, 2005 for pollution prevention and good housekeeping. Informal spill prevention, control and countermeasure (SPCC) training was conducted on a monthly basis with Highway Department employees.	Continue existing training programs, incorporate new topics and expand programs as appropriate.
Revised					
6I	Municipal Operation/Maintenance Plan	Highway Department	Improved operations at municipal facilities and throughout Town.	Municipal facilities are evaluated on a regular basis for pollution issues. Work began to document protocols for municipal operations. The Town began work to develop a Beneficial Use Determination (BUD) for the reuse of stormwater residuals.	Evaluate and document BMP evaluations and draft BMPs for municipal facilities and operations. Begin compiling a draft Municipal Operation and Maintenance Plan and continue to develop a BUD for stormwater residuals.
Revised					

6a. Addition

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
6J	Mosquito Control Project & Drainage System Maintenance	Engineering/Conservation	Record of improved drainage system inspection and maintenance.	Through the efforts of the Central Massachusetts Mosquito Control Project, brush and other accumulated debris was removed from culverts and streams to ensure proper flow conditions and reduce the amount of stagnant water available for mosquito breeding. Cleaning areas were recorded to determine future cleaning needs.	Continue mosquito control program.
Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3

7a. No additions at this time.

7b. WLA Assessment

Stony Brook in Westford is a 303d listed water that is classified as Category 5 “Waters Requiring a TMDL”. Water quality concerns associated with Stony Brook will be addressed through the implementation of BMPs under the six minimum measures for Phase II, as outlined in the Westford Stormwater Management Plan (SWMP). Stony Brook is highlighted in the Westford SWMP as a priority for implementation activities throughout the permit term. The WLA Assessment will be addressed as part of the Town’s SWMP, as the TMDL study is completed for Stony Brook or those water bodies with watersheds in Westford.

Part IV. Summary of Information Collected and Analyzed

Ten outfalls were identified as a high priority due to known water quality problems at receiving waters. These outfalls were screened for illicit discharges and dry weather flow sampling at 6 outfalls indicated 3 illicit discharges were present, as indicated in the summary table below. Illegal dumping was observed at another outfall. The Town conducted source investigations at some locations, which required additional work to remove non-stormwater flows.

Water Quality Parameters	Outfall ID No.					
	1	4	7	8	9	10
Fecal Coliform (#/100ml)	200	130,000	21,000	<100	20,000	20
E. coli (#/100ml)	<10	>20,000	10	20	<10	10
Ammonia (mg/L)	ND	41.1	0.714	ND	20.9	0.382
Surfactants ((MBAS) mg/L)	0.095	1.00	0.05	< 0.05	0.2	ND
Fluoride (mg/L)	< 0.05	0.34	< 0.05	< 0.05	1.29	< 0.010
Chlorine (mg/L)	ND	ND	ND	ND	ND	ND

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	TBD

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	N/A
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	370 cars
▪ material collected	(tons or gal)	See Below*
School curricula implemented	(y/n)	Yes
*Specific quantities are not available for all materials collected but the following volume estimates are available: 274 full cars, 96 half cars, 2 roll-offs and 5 asbestos drums.		

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control		X		
▪ Post-Development Stormwater Management		X		
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control		X		
▪ Post-Development Stormwater Management		X		

Mapping and Illicit Discharges

Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	10*
Illicit discharges identified	(#)	4*
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	
% of population on septic systems	(%)	100%
*The Westford DPW inspects stormwater outfalls on an annual basis for drainage and erosion problems. Future inspections will target water quality issues for stormwater management and illicit discharge detection.		

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	
Tickets/Stop work orders issued	(# or %)	
Fines collected	(# and \$)	
Complaints/concerns received from public	(#)	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	Not Assessed

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1-2/yr ¹
Total number of structures cleaned	(#)	2,700 approx.
Storm drain cleaned	(LF or mi.)	200 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	283 tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Disposal
Cost of screenings disposal	(\$)	
1. Drainage structures in hilly areas are cleaned more frequently based on the rate of sediment accumulation.		

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2
Qty. of sand/debris collected by sweeping	(lbs. or tons)	800 CY
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Disposal
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	1 owned*
Vacuum street sweepers specified in contracts	(y/n)	Y
*The Town owns 1 vacuum/mechanical sweeper and contracted another sweeper to complete all roads in Town.		

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	
<i>Ice-Ban (MgCl₂) is applied to a 90:10 sand/salt mixture with a sprayer as the materials are dispensed from trucks during de-icing activities. On some occasions, straight salt applications are used in town.</i>		
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	Zero Velocity
Estimated net reduction in typical year salt application	(lbs. or %)	Not Assessed
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	